

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently amended): A method for measuring potential tumorigenicity of mammalian cells comprising:

- a. providing a ~~tissue sample or~~ sample of medium surrounding cells, and
- b. detecting the presence of a fragment of α -dystroglycan in medium, said fragment having an Mr of 120-130kD, whereby the presence of the fragment indicates higher potential tumorigenicity.

Claim 2 (Original): The method of claim 1, wherein said detecting comprises:

- a. adding to said sample a material selected from the group consisting of a monoclonal antibody to α -dystroglycan and laminin, and
- b. measuring the size of the α -dystroglycan fragment detected.

Claim 3 (Original): The method of claim 1, wherein said cells are human mammary epithelial cells.

Claim 4 (Original): The method of claim 1, wherein said medium is blood serum.

Claim 5 (Original): A method for measuring potential tumorigenicity of cells, comprising:

- a. providing a sample of said cells, and
- b. detecting the presence of α -dystroglycan on the surface of the cells, whereby the absence of α -dystroglycan indicates a higher potential for tumorigenicity.

Claim 6 (Original): The method of claim 5, wherein said detecting comprises:

- a. adding to said sample a monoclonal antibody to α -dystroglycan, and
- b. measuring the amount of labeled α -dystroglycan detected.

Claim 7 (Original): The method of claim 5, wherein said cells are human mammary epithelial cells.

Claim 8 (Original): The method of claim 5, wherein said detecting comprises measurement of the amount of α -dystroglycan relative to the amount of β -dystroglycan, wherein a relative

decrease of α -dystroglycan indicates α -dystroglycan shedding and higher potential tumorigenicity.

cancelled A
Claims 9 – 21 (~~Withdrawn~~).

Claim 22 (Previously amended): A method of assaying proteolysed α -dystroglycan fragments shed from a cell into blood serum comprising the steps of:

- a. contacting a serum sample to be assayed with a labeled antibody specific for an α -dystroglycan fragment, and
- b. assaying the amount of bound label,

CA
wherein said α -dystroglycan fragments bound to said labeled antibody are positively correlated with tumor cell growth.

Claim 23 (Original): The method of Claim 22, wherein the α -dystroglycan fragment is an approximately 120 kD fragment.

Claim 24 (Original): The method of Claim 22, wherein the α -dystroglycan fragment is an approximately 60 kD fragment.

cancelled A
Claims 25 – 28 (~~Withdrawn~~).

Claim 29 (Previously added): The method of claim 22, wherein said cell is an epithelial cell.

Claim 30 (Previously added): The method of claim 29, wherein said epithelial cell is a breast epithelial cell.
